

## Complete Summary

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### GUIDELINE TITLE

American Gastroenterological Association medical position statement: treatment of pain in chronic pancreatitis.

### BIBLIOGRAPHIC SOURCE(S)

American Gastroenterological Association Medical Position Statement: treatment of pain in chronic pancreatitis. Gastroenterology 1998 Sep;115(3):763-4. [2 references] [PubMed](#)

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## SCOPE

### DISEASE/CONDITION(S)

Pain in chronic pancreatitis

### GUIDELINE CATEGORY

Evaluation  
 Management  
 Treatment

### CLINICAL SPECIALTY

Family Practice  
 Gastroenterology  
 Internal Medicine  
 Surgery

### INTENDED USERS

Physicians

## GUIDELINE OBJECTIVE(S)

To provide recommendations on the treatment of pain in chronic pancreatitis

## TARGET POPULATION

Patients with abdominal pain in chronic pancreatitis

## INTERVENTIONS AND PRACTICES CONSIDERED

### Assessment

1. Computed tomography (CT)
2. Endoscopic retrograde cholangiopancreatography (ERCP)
3. Endoscopic ultrasonography (EUS)
4. Upper endoscopy
5. Upper gastrointestinal (GI) series

### Medical Treatment

1. Nonspecific supportive treatment, including non-narcotic analgesics and antidepressants
2. Low-fat diet
3. Narcotic analgesics
4. H<sub>2</sub>-receptor blocking agents or proton pump inhibitor
5. High-dose pancreatic enzymes
6. Octreotide (considered but not recommended for general use)
7. Endoscopic therapy (placement of pancreatic duct stents, lithotripsy of pancreatic stones)
8. Reduction of oxidative stress with antioxidant therapy or allopurinol (considered but not recommended)

### Surgical Treatment

1. Decompression/drainage operations (lateral pancreaticojejunostomy)
2. Pancreatic resections (e.g., Whipple procedure or pylorus-preserving pancreaticoduodenectomy, distal pancreatectomy, total pancreatectomy, and duodenum-preserving resection of the pancreatic head)
3. Denervation procedures

## MAJOR OUTCOMES CONSIDERED

- Quality of life
- Pain intensity and frequency
- Morbidity and mortality of treatment
- Presence of diabetes mellitus

## METHODOLOGY

### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The authors have focused on selected articles published in high-quality refereed journals during the past 15 years. The authors included data published in abstract form only when the information is new, important, and evaluable but unavailable in a more complete version.

### NUMBER OF SOURCE DOCUMENTS

22 articles on medical (nonsurgical) therapy published between 1984 and 1997

15 articles on surgical treatment

### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Subjective Review

### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

### METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review with Evidence Tables

### DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Before selecting studies for inclusion, the guideline authors determined that the following criteria were essential for evaluation of pain before treatment: Duration of pain dating back to the first episode.

- Character of pain: intermittent versus daily; frequency if intermittent
- Subjective estimation of intensity of pain: mild, moderate, or severe
- Objective measurement of pain: visual analogue or descriptor
- Use of narcotics and other medications to treat pain
- Evaluation of addition to narcotics
- Documentation that other diseases have been excluded that could be causing abdominal pain
- Measurement of quality of life including work performance, social interaction, and family interaction

The following criteria for methodology of the study and reporting of results were determined to be essential by the authors:

- Etiology
- Number of patients with alcoholic pancreatitis
- Discontinuation of alcohol consumption
- Appropriateness of criteria for diagnosing chronic pancreatitis
- Documentation of diabetes
- Documentation of steatorrhea
- Objective parameter(s) of relief of pain
- Documentation of individual who secured information regarding results
- Methodology of obtaining results (in person versus mail versus telephone)
- Follow-up at least 1 year in all patients in the study
- Morbidity and mortality
- Formal assessment of pain before onset of study
- Blinded study
- Prospective study

The authors then chose 22 articles on medical (nonsurgical) therapy published between 1984 and 1997 that best met the predetermined criteria. To exemplify the shortcomings of even these "best" studies, the authors then reanalyzed each according to those same criteria and tabulated how well each performed.

For the pretreatment evaluation of pain, only 4 of the 22 articles provided information regarding the evaluation of addiction to narcotics, 4 provided measures of quality of life, and 10 included adequate information regarding the duration of pain dating back to the first episode. Regarding the 14 criteria for methodology, 6 provided information regarding the continued consumption of alcohol, 7 provided a formal assessment of pain at the onset of treatment, 9 provided information on the existence of diabetes and 11 on steatorrhea, 10 were blinded, and only 12 were prospective.

Tables 5 and 6 in the original guideline document show a derivation of the same criteria applied to the description of preoperative pain in studies of patients chosen for surgical treatment. These studies were culled from the surgical literature using the same predetermined criteria. In addition, a pain evaluation score (PES) was derived for these tables by allocating one point for each criterion met. It again shows the deficiencies of the best available studies. Only 2 studies contained a formal quality-of-life assessment. Only 3 of 22 nonsurgical studies and 6 of 15 surgical studies required an evaluation period of at least 1 year after treatment. Only 3 were randomized between treatment options, and only 1 compared surgical with nonsurgical treatment.

As a consequence, the authors were required to use less stringent criteria for the selection of our database while still attempting to extract the analyses most likely to provide evaluable information.

## METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

## RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

## COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

## METHOD OF GUIDELINE VALIDATION

Peer Review

## DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

This document was approved by the Clinical Practice and Practice Economics Committee on March 8, 1998, and by the American Gastroenterological Association Governing Board on April 9, 1998.

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

The management of abdominal pain in chronic pancreatitis can be a challenging problem. It is the symptom that most commonly brings the patient to medical attention and the one that is most difficult to control effectively. Its presentation varies through a wide spectrum, from mild and intermittent, to constant and disabling, leading to loss of work and frequent hospitalization. The potential for narcotic addiction is high and frequently compounded by a history of past or present alcohol abuse.

The heterogeneity of this patient population, the subjective nature of pain, and a poor understanding of its pathophysiology are all obstacles to studies directed at effectiveness of pain management. There are few controlled trials that meet high standards for clinical research and none that compare surgical and nonsurgical therapy. Accordingly, there is no established standard of care. The algorithm in the original guideline document is based on the data available and may serve as a guideline. It begins by excluding other causes of pain, including both complications of chronic pancreatitis such as pseudocyst or biliary stricture and other conditions commonly found in this population such as peptic ulcer disease.

Assessment of the patient's pain and its nature, frequency, severity, and impact on other activities is key to objective decisions that may entail injurious interventions. A good way to begin is by having the patient keep a log of pain and by assessing quality of life with one of the available instruments. After the initial assessment, a trial of high-dose pancreatic enzymes coupled with H<sub>2</sub>-blockers should precede the continuous use of narcotics or any invasive treatment.

At present, the evidence supporting the use of endoscopic therapy for pain in chronic pancreatitis is preliminary and largely confined to short-term focused observations. Although sphincterotomy, lithotripsy, and pancreatic duct stenting may hold promise, these procedures need further evaluation in clinical trials.

Although there have been no controlled trials comparing surgery with either medical treatment, endoscopic treatment, or no treatment, substantial experience

indicates lasting benefit in at least some patients. However, the failure rate of 20%-40% in even the most enthusiastic reports, as well as the potential for surgical morbidity and mortality, warrant reserving surgical treatment for patients with severe pain not responsive to lesser tactics. The choice of operation, if elected, should be predicated on the morphology of the pancreatic ducts. Thoracoscopic nerve ablation is under investigation as an alternative to pancreatic resection in patients without dilated pancreatic ducts.

#### CLINICAL ALGORITHM(S)

An algorithm is provided in the original guideline document for treatment of pain in chronic pancreatitis.

### EVIDENCE SUPPORTING THE RECOMMENDATIONS

#### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

The recommendations are based on a technical review of the literature that focused on selected articles published in high quality refereed journals during the past 15 years. Twenty-two articles on medical (nonsurgical) therapy published between 1984 and 1997 and 15 articles on surgical treatment were chosen for analysis.

### BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

#### POTENTIAL BENEFITS

Appropriate management of pain in chronic pancreatitis

#### POTENTIAL HARMS

The possible benefits conferred by endoscopic pancreatic duct stenting also need to be balanced against the risk of causing damage to the duct and complicating the course of the disease. Two recent studies emphasized that 50%-80% of patients who have polyethylene stents placed in the pancreatic duct for even a relatively short time (1-8 weeks) suffer significant ductal and parenchymal injury.

Operative procedures are associated with some morbidity and mortality.

### QUALIFYING STATEMENTS

#### QUALIFYING STATEMENTS

- The purpose of the technical review was to focus principally on the treatment of pain in chronic pancreatitis when there is no obvious abnormality to remedy. Pseudocysts and obstruction of the bile duct, duodenum, and major

- peripancreatic veins were considered only in association or in passing inasmuch as the rationale for treating these entities is better defined and agreed upon. Management of diabetes or steatorrhea per se was not discussed. The differential diagnosis from cancer of the pancreas is of self-evident importance but was outside the scope of the analysis.
- The literature on treatment of pain in chronic pancreatitis is replete with and characterized by retrospective collections of patients who were subjected to treatment determined by interest in applying a certain method and evaluating, usually in vague subjective terms, whether that treatment worked. Whereas the benchmark for assessing effectiveness of treatment in clinical studies is the performance of a randomized, prospective, double-blind, placebo-controlled trial, few studies of the treatment of pain in chronic pancreatitis have embraced this standard.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Getting Better  
Living with Illness

### IOM DOMAIN

Effectiveness  
Safety

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

American Gastroenterological Association Medical Position Statement: treatment of pain in chronic pancreatitis. Gastroenterology 1998 Sep;115(3):763-4. [2 references] [PubMed](#)

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

1998 Apr 9 (reviewed 2001)

#### GUIDELINE DEVELOPER(S)

American Gastroenterological Association - Medical Specialty Society

#### SOURCE(S) OF FUNDING

American Gastroenterological Association

#### GUIDELINE COMMITTEE

American Gastroenterological Association Clinical Practice and Practice Economics Committee

#### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

#### FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

#### GUIDELINE STATUS

This is the current release of the guideline.

An update is not in progress at this time.

According to the guideline developer, the Clinical Practice Committee meets 3 times a year to review all American Gastroenterological Association guidelines. This review includes new literature searches of electronic databases followed by expert committee review of new evidence that has emerged since the original publication date.

This guideline has been reviewed by the developer and is still considered to be current as of Dec 2001.

#### GUIDELINE AVAILABILITY

Electronic copies: Available from the [American Gastroenterological Association \(AGA\) Gastroenterology journal Web site](#).

Print copies: Available from American Gastroenterological Association, 4930 Del Ray Avenue, Bethesda, MD 20814.

#### AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Warshaw AL, Banks PA, Fernandez-Del Castillo C. AGA technical review: treatment of pain in chronic pancreatitis. Gastroenterology. 1998 Sep; 115(3):765-76. [91 references].

Electronic copies: Available from the [American Gastroenterological Association \(AGA\) Gastroenterology journal Web site](#).

The following is also available:

- The American Gastroenterological Association standards for office-based gastrointestinal endoscopy services. Gastroenterology. 2001 Aug; 121(2):440-443 [8 references].

Electronic copies: Available from the [American Gastroenterological Association \(AGA\) Gastroenterology journal Web site](#).

Print copies: Available from American Gastroenterological Association, 4930 Del Ray Avenue, Bethesda, MD 20814.

#### PATIENT RESOURCES

None available

#### NGC STATUS

This summary was completed by ECRI on June 5, 2002. The information was verified by the guideline developer on July 12, 2002.

#### COPYRIGHT STATEMENT

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Date Modified: 11/8/2004



